

Claims

1. Apparatus for detecting airflow blockage of a fan that is driven by a permanent split-capacitor single-phase AC motor having a main winding and an auxiliary winding, the apparatus comprising:

5 main sensor means for detecting an AC current in said main winding;

 auxiliary sensor means for detecting an AC current in said auxiliary winding;

 means for detecting a difference between the AC currents detected by said main and auxiliary sensor means; and

10 alarm means for indicating an airflow blockage of said fan when the detected difference exceeds a specified setpoint.

2. The apparatus of Claim 1, wherein at least one of said main and auxiliary sensor means comprises a resistor connected in series with its respective winding, and a thermistor thermally coupled to said resistor for measuring the heating of said resistor due to current in the respective winding.

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3. The apparatus of Claim 1, wherein said main and auxiliary sensor means each comprise a resistor connected in series with the respective main and auxiliary winding, and a thermistor having a resistance that varies in relation to an RMS value of said AC current in the respective winding, and wherein said
5 means for detecting a difference includes a bridge circuit coupled to said thermistors.